

Chapter II. Vision and Guiding Principles

A. What is the operational philosophy of this plan?

Each element in the health care environment adds value to all constituents by improving access, quality and efficacy in a cost-effective manner. Consumers and their communities are the center of the health care delivery system. Health care delivery is reconfigured locally as appropriate, given the health needs of the area and the availability of resources. It is recognized that in order for a state of our small population to have access to certain types of high skill level and/or high cost services, we must band together to share such services and understand that some services may never be provided within our State.

B. What is the Hawai`i health care vision?

Our vision is:

Supported by their community, individuals achieve optimum health.

In 1995, children of Hawai`i participated in a community planning exercise. Their process produced a vision regarding health care: The health of the people of Hawai`i has been improved through the prevention of disease.

(Excerpt from Ke Ala Hoku: *The Children's Vision*, 6/95)

Complementing our children's view of the future is our vision, which is the product of a diverse group of persons representing the many industries and communities that are members of our larger "state community."

C. What are the goals and objectives for realizing the vision?

1. Goals. The *Hawai`i Health Performance Plan* draws on the goals of national and local efforts, such as *Healthy People 2000* and *Healthy Hawai`i 2000*. These are integrated with community-specific concerns as well as age-group sub-goals from the companion *Healthy Communities 2000 Model Standards*:

- Increase the span of healthy life for Hawai`i's residents.
 - Children will develop and mature in good health, secure in their prospects for a productive and happy future.
 - Adolescents and young adults will develop and mature in good health, secure in their prospects for a happy future.
 - The community will promote a healthy lifestyle among adults to eliminate

preventable illness, disability, and premature death.

- Older adults will maintain good health and independent personal functioning.
- Reduce health disparities among Hawai'i's residents.
- Achieve equitable and effective access at reasonable cost for all Hawai'i's residents to health services that are responsive to the holistic needs of community's members.

2. Objectives. Objectives supporting these goals include:

- ◆ Promoting successful birth outcomes.
- ◆ Reducing the incidence of vaccine-preventable childhood diseases.
- ◆ Early detecting and diagnosing of treatable diseases.
- ◆ Reducing the effects of chronic disease and prolonging health related quality life.
- ◆ Reducing morbidity and pain through timely and appropriate treatment.
- ◆ Establishing regionalized health care delivery systems that include community input, are cost-effective, and that foster improved access to quality health care services.
- ◆ Reducing the risk of injury and violence by promoting a safe environment and a safe community.

D. What are the basic principles for a health care delivery system?

A health care delivery system that is comprehensive, cost-effective, well coordinated, and responsive to community/regional needs, can help us achieve our goals and objectives.

The focus for a community's wellness is education and prevention, access to primary care, sharing secondary and tertiary care, and access to chronic disease management. Primary health care is basic general health care. It includes appropriate treatment of common diseases and injuries, provision of essential drugs, and coordination of specialty care. Primary care is the "hub" of a community's health care system. It addresses most of the basic community health care needs, including health promotion and disease prevention and disease management services. Primary health care should be the first priority, and should be available with reasonable access for all communities.

Secondary care supports and carries out those more complex health care functions that are specialized beyond basic primary care. Examples of secondary care include such services as specialty care, limited surgery, short-term mental illness treatment, nursing homes, and obstetrics. Secondary care is often shared between communities and regions.

The most complex health problems require highly skilled practitioners who perform specialized procedures on a routine and frequent basis so that they may maintain the skill levels necessary to ensure good quality care. A tertiary care center is where these specialized practitioners are concentrated to serve the community. As a community we recognize that have good quality and cost-effective tertiary care by sharing such care amongst regions. We acknowledge that one such service or facility may even need to be shared by the entire State in order to have effective utilization and thereby have good quality care occur. For these same reasons, we also acknowledge that for some very highly specialized tertiary care, we

may need to facilitate cost-effective access paths to practitioners on the mainland U.S. or in other locations worldwide.

E. What are the desired characteristics of a health care delivery system?

The desired characteristics of a contemporary health care system are:

- Emphasis on basic primary care as a means of increasing access to quality care in a cost-effective manner in various community settings.
- Supporting collaborative relationships between local, regional and state health care providers in order to provide the most appropriate care coverage to our communities.
- Recognition that some services may never be provided within our state because our population is too small to adequately maintain the utilization rates necessary to maintain consistently good quality care, and therefore facilitating access paths to those services elsewhere.
- Incorporating community input to health care planning processes.
- Focusing on health performance outcomes for evaluating and planning for health care services.

F. What are the critical elements of a health care delivery system?

Well-functioning health care delivery addresses: access to care, continuity of care, constituent participation, resource management/ cost-containment, and quality management. The following are the key critical elements that keep health care delivery responsive to community needs and industry standards.

1. Access. Access to appropriate, culturally sensitive care—from preventive and primary care to tertiary care and disease management—in the most comprehensive practical model possible, given the population’s size, needs, and resources, is a high priority. Equitable, effective and efficient access is achieved through an adequate availability of quality health care that is reasonable in cost, with priority given to those services that benefit the majority of the residents and that are cost-effective.

2. Quality Management. Health care providers and organizations are committed to high standards of quality and professional ethics and to the principle that patients come first. The use of clinical benchmarks (best practices) and patient satisfaction surveys along with contributions towards improving the community’s health status as seen via the performance outcome measures in the following chapters are indicators of a community’s health delivery system’s quality management.

3. Cost-Effectiveness. Our limited health care resources are allocated for the most cost-effective and necessary services. Cost-effectiveness incorporates the

assurance that good quality of care standards will be maintained. Where feasible, resources should be directed to programs and services that prevent illness and intervene in the early stages of disease. Determination of effectiveness is based in part on the principal health status indicators contained in the following chapters. It also encourages the appropriate use of outpatient treatment modalities, community-based services, mid-level practitioners and midwives, contemporary reimbursement programs, and conversion of underutilized existing facilities to uses that can serve a demonstrated need in the greater majority of the population.

4. Continuity of Care. Seamless continuity of care (the right care, at the right time, in the right setting) is promoted and facilitated via the integration of care providers in the community. This means that each individual health care facility and/or practitioner acknowledges that they are just one member of the larger continuum of health services available in the community and thereby works in concert with other care providers to improve the overall health status of the community.

5. Constituent Participation. Communities—composed of consumers and care providers—work together in defining, assessing and evaluating health care services, health care development, and community health education initiatives in their geographic area.

G. What are the capacity thresholds to guide the developing of new, modified, or expanded health care facilities, services, and technology?

Each new, expanded, or otherwise modified health care facility, service, or technology is designed primarily to add value to the health care delivery.

Value is measured in terms of the appropriateness and extent to which the project improves access, quality, and/or cost-effectiveness as a means of achieving good patient health care outcomes.

In order to assess the potential for cost-efficient and cost-effective resource use, optimum annual utilization of new or existing resources, or in some circumstances a sub-optimum range that allows for consideration of significant regional factors, is a part of the initial considerations of value.

In addition, beyond regional factors, thresholds may be modified to:

- Incorporate current and best clinical practices;
- Allow for the transition and capital investment in moving traditional in-patient services to outpatient modalities;
- Allow for the cost-effective introduction of modern technology to replace existing capacity;
- Address the documented needs of an actual population rather than basing care design on statistical generalizations;
- Create opportunities for price reduction through competition, without sacrificing quality or cost-effectiveness of care; and
- Encourage innovation in improving health care services that contribute to enhance-

ing a community's health status.

In each case where sub-optimum utilization is proposed, the benefits—in the form of improved access for the service area(s) population combined with significant improvement in quality and/or significant reduction in price to the public—clearly outweigh the costs to the community of duplicating or under-using services, facilities, or technology. This provision of sub-optimum utilization is not intended to be applied to conditions that (1) address convenience for the provider and patients of the service(s) and (2) service areas that have existing excess capacity for that service(s), including existing beds, facilities and/or services.

Examples of situations where sub-optimum utilization is allowed by the Agency include:

CT for Molokai General Hospital: The population size of Molokai is too small to ever meet the threshold standard to justify a CT. However, concerns about access and quality of care (CT is a standard of care for hospitals) outweighed the sub-optimum utilization data. Therefore, the Agency approved the certificate of need application for a CT from Molokai General Hospital.

Gamma Knife for Hawai'i. The gamma knife is used for specialized treatment of certain types of brain tumors. The current frequency of such brain tumors in Hawai'i, and the surrounding Pacific Basin region, is below the utilization numbers needed for a gamma knife. However, given the fact that there is no other gamma knife in the Hawai'i/Pacific Basin region and that the knife provides improved patient brain surgery outcomes, the Agency approved the application for a gamma knife for St. Francis Hospital.

In cases where fixed equipment or service is proposed to replace mobile equipment, the change is accomplished without any increase in the costs and charges for the service, based on the current volume of the mobile service.

New and existing services, facilities, and equipment meet or exceed all relevant licensing, accrediting, and certification requirements and professional specialty boards' or associations' quality guidelines.

Forecasting service use employs patient origin data and use rates of existing services and market share forecasting that takes into account actual utilization data. The number of new beds or new services is based on a need methodology that is reliable, probative, and substantial. Prevalence, presentation, and modality rates and average lengths of stay are modified as appropriate for different funding sources such as public funding or private-pay or private insurance funding.

In addition to the development guidelines above, the following capacity (utilization) thresholds for certain standard categories of health care services guide the initial calculation of the need-related value for a health care facility, service, or technology:

Unit/Service	Capacity Threshold
1. Computed Tomography (CT) Unit	1. For a new unit/service, the minimum average annual utilization for all other providers in the service area is 3,500 HECTs or 3,000 CT procedures, and the utilization of the new unit/service is projected to meet the minimum utilization rate by the third

<i>Unit/Service</i>	<i>Capacity Threshold</i>
	<p>year of operation.</p> <p>For expansion of existing units/services, the provider's utilization is at least 5,000 HECTs or 4,5000 CT procedures.</p> <p>CT scanners are staffed to operate a minimum of 40 hours per week, and are accessible for use and usable for medical emergencies 24 hours a day.</p>
2. Magnetic Resonance Imaging (MRI) Unit	<p>2. For a new unit/service, the minimum average annual utilization for all other providers in the service area is 1,500 procedures, and the utilization of the new unit/service is projected to meet the minimum utilization rate by the third year of operation.</p> <p>For expansion of existing units/services, the provider's utilization is at least 2,750 scans per year.</p>
3. Positron Emission Tomography (PET) Unit	<p>3. For a new unit/service, the minimum average annual utilization for all other providers in the service area is 1,000 procedures, and the utilization of the new unit/service is projected to meet the minimum utilization rate by the third year of operation.</p> <p>For expansion of existing units/services, the provider's utilization is at least 1,500 procedures per year.</p>
4. Lithotripsy Unit	<p>4. For a new unit/service, the minimum average annual utilization for all other providers in the service area is 1,000 procedures, and the utilization of the new unit/service is projected to meet the minimum utilization rate by the third year of operation.</p> <p>For expansion of existing units/services, the provider's utilization is at least 1,000 procedures per year.</p>
5. Hemodialysis	<p>5. For a new service, the minimum average annual utilization rate for all other providers in the service area is 80 percent, and the utilization of the new service is projected to meet 75 percent utilization rate by the third year of operation.</p> <p>For expansion of existing services, the provider's utilization rate is at least 80 percent per year.</p> <p>Full utilization is a minimum of 3.5 treatments per station, and optimum facility size is a minimum of six stations.</p>
6. Radiation Therapy Unit	<p>6. For a new unit/service, all other providers in the service area have averaged a minimum utilization of 8,000 procedures and</p>

Unit/Service	Capacity Threshold
	<p>320 patients per year, and the new unit/service is projected to achieve a minimum utilization of 6,000 procedures by the third year of operation.</p> <p>For expansion of existing services, the provider's utilization rate is at least 80 percent per year.</p> <p>Optimum capacity per unit is 9,792 procedures annually, based on four patients per hour, 48 hours per week, for 51 weeks.</p>
7. Gamma Knife	<p>7. For a new unit/service, all existing units in the service area have performed at an average utilization rate of 80 percent of capacity, and the new unit/service is projected to perform a minimum of 200 procedures annually by the third year of operation.</p> <p>For expansion of existing services, the provider's unit utilization rate is at least 80 percent per year, and the additional equipment is projected to achieve the minimum utilization of 200 procedures by the third year of operation.</p> <p>The capacity of a gamma knife unit is 500 procedures annually, based on an average of two procedures per day, 250 days per year. The minimum caseload is 150 procedures per year.</p>
8. Adult Cardiac Catheterization Lab	<p>8. For a new service/unit, the minimum average utilization for all other providers in the service area is 1,000 diagnostic-equivalent cardiac catheterization procedures, and the new service/unit is projected to achieve a utilization of at least 750 adult cardiac catheterization procedures in the third year of operation.</p> <p>For expansion of an existing service/unit, the provider's annual utilization is at least 1,125 diagnostic-equivalent cardiac catheterization procedures.</p> <p>Maximum capacity of a cardiac catheterization laboratory is 1,250 diagnostic equivalents per year, based on 5 equivalent procedures per day for 250 days per year.</p>
9. Pediatric Cardiac Catheterization	<p>9. In addition to adult cardiac catheterization thresholds above, the minimum number of pediatric cardiac catheterizations to be done per year is 150, with cardiac catheterizations of infants done only in a facility that has an active pediatric cardiac surgical program.</p>

<i>Unit/Service</i>	<i>Capacity Threshold</i>
10. Open Heart Surgery Rooms	<p>10. For a new unit/service, the minimum average utilization for all other providers in the service area is 350 adult or 130 pediatric open-heart operations per year, and the new service/unit is projected to achieve a utilization of at least 200 adult or 100 pediatric open-heart operations in the third year of operation.</p> <p>For expansion of an existing unit/service, the provider's annual utilization is at least 350 adult or 130 pediatric open-heart operations, and the additional unit/service is projected to achieve the minimum capacity in the third year of operation.</p> <p>Minimum capacity for open-heart surgery is 200 adult or 75 pediatric open-heart operations per year. Where open-heart surgical teams use more than one institution, a minimum of 75 open-heart operations in any one institution is recommended.</p>
11. All Other Operating Rooms:	
a. Inpatient Only (more than 24 hours stay)	<p>11.a. For a new or additional inpatient operating room, all other comparable operating rooms in the service area average a minimum of 1,600 hours per room utilization per year.</p> <p>Capacity of an inpatient operating room is 80 percent utilization or 1,500 hours per room, based on 7.5 hours per day for 250 days per year.</p>
b. Blended Inpatient/Outpatient (less than 24 hours stay)	<p>11.b. For a new or additional blended inpatient/outpatient operating room, all other comparable operating rooms in the service area average a minimum of 1,600 hours per room utilization per year.</p> <p>Capacity of a blended inpatient/outpatient operating room is 80 percent utilization or 1,500 hours per room, based on 7.5 hours per day for 250 days per year.</p>
c. Freestanding Ambulatory Surgery Center (less than 24 hours stay)	<p>11.c. For a new or additional ambulatory surgery operating room, all other comparable operating rooms in the service area average a minimum of 1,600 hours per room utilization per year.</p> <p>A facility proposing expansion is utilizing its own capacity at 80 percent or greater.</p> <p>Capacity of an ambulatory surgery operating room is 80 percent utilization or 1,500 hours per room, based on 7.5 hours per day for 250 days per year.</p>

<i>Unit/Service</i>	<i>Capacity Threshold</i>
	<p>The minimum number of operating rooms for a new facility is two operating rooms and, except for facilities restricted to endoscopy procedures only, are open to all surgical specialties..</p>
12. Medical/Surgical Bed	<p>12. For a new or additional medical/surgical bed, all existing medical/surgical beds in the service area average an annual occupancy rate of 80 percent or higher based on number of licensed beds rather than on staffed beds.</p> <p>Target occupancies encourage efficiency operation, and vary with bed capacity:</p> <ul style="list-style-type: none"> a. 0-174 bed rural hospital with less than 4,000 admissions 75% occupancy b. 0-174 bed urban hospital or rural hospital with greater than 4,000 admissions 80% occupancy c. 175-299 beds 80% occupancy d. 300+ beds 85% occupancy <p>The optimal occupancy rate for medical/surgical beds is 90 percent.</p>
13. Intensive Care (ICU) Bed	<p>13. For a new or additional ICU bed, the minimum occupancy rate, based on total licensed beds, is 60 percent and the optimal rate is 85 percent.</p>
14. Obstetric (OB) Bed	<p>14. For a new or additional obstetric bed, all existing OB beds in the service area have averaged an annual utilization rate of 80 percent.</p> <p>Optimum occupancy rates are 75 percent for Levels II and III and 65 percent for Level I units.</p> <p>The optimum number of deliveries per year for Level II and Level III OB units is 1,100 deliveries, and for Level I units, 750 deliveries.</p>
15. Neonatal Intensive Care (NICU) Bed	<p>15. For new or additional NICU beds, the overall average annual occupancy of the total number of existing Level II and Level III beds in the service area is at least 80 percent.</p> <p>NICU services are planned on a regional basis with linkages with obstetrical services, with a single NICU (Level II or Level III) containing a minimum of 15 beds. The minimum size of a Level II unit may be adjusted downward when travel time to an alternate unit is a serious hardship due to geographic remoteness.</p>

<i>Unit/Service</i>	<i>Capacity Threshold</i>
16. Pediatric Bed	16. For a new or additional pediatric bed the minimum average annual utilization for all other providers in the service area is at least 80 percent of licensed pediatric bed occupancy.
17. Psychiatric Bed	<p>17. For a new or additional psychiatric bed, the average annual occupancy rate for all similar service providers in the service area is at least 80 percent for adult (age 18 and over) programs and at least 75 percent for children's (ages 7 to 17) programs.</p> <p>The minimum occupancy rate, based on total licensed beds, is 70 percent, and the optimal occupancy rate is 90 percent.</p> <p>The minimum bed size of a new acute psychiatric program is eight beds. The minimum bed size of a psychiatric unit in a general acute care facility is 15 beds. The minimum bed size of a freestanding psychiatric unit licensed as a specialty hospital is 40 beds.</p> <p>Children and adolescents are treated in units that are programmatically and physically distinct from adult patient units.</p>
18. Substance Abuse/ Chemical Dependency Bed	<p>18. For a new or additional substance abuse bed, the average annual occupancy rate for licensed beds for all service providers in the service area is at least 75 percent for facilities with a total of 1-15 intensive treatment beds and detoxification beds, and at least 85 percent for facilities with a total of 16 or more intensive treatment beds and detoxification beds.</p> <p>The target occupancy of substance abuse treatment units in hospitals and residential facilities is 85 percent. The target occupancy of facilities that provide only detoxification services is 80 percent.</p> <p>Children and adolescents (ages 12-17) are treated in units that are programmatically and physically distinct from adult (age 18 and over) patient units.</p>
19. Inpatient Rehabilitation Bed	<p>19. For a new or additional inpatient rehabilitation bed, the average annual occupancy rate of all existing licensed rehabilitation beds in the service area is at least 80 percent for a 20-50 bed unit and at least 85 percent for a unit of 50 beds or larger.</p> <p>The minimum size of an inpatient rehabilitation unit in an acute care hospital is 20 beds. The minimum size of a freestanding</p>

<i>Unit/Service</i>	<i>Capacity Threshold</i>
	rehabilitation hospital is 50 beds.
20. Long-Term Care Bed	20. For a new or additional long-term care bed, the average annual occupancy rate for all existing long term-care beds in the service area is at least 95 percent. The target average annual occupancy rate for a long-term care facility is at least 90 percent.
21. Residential Hospice Services	21. The target average annual occupancy for residential hospice services is at least 85 percent.

H. What are other potential statewide measures?

The following are “statewide” performance measures that are important in assessing the adequacy of the health care systems, which bear further analysis in future editions of this plan.

- Patient satisfaction (as measured by survey)
- Price-adjusted health expenditures per capita
- State/local spending for health/hospital care as a percentage of personal income
- Hospital expense per patient stay (acuity adjusted)
- Ratio of active physician workforce by geographic regions.
- Expenditures on preventive care
- Life expectancy
- Age-adjusted overall death rate
- Infant mortality
- Average hospital length of stay.